

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/198,751 11/24/98 HIGUCHI

M SEL-119

MM91/1106

COOK MCFARRON & MANZO
200 WEST ADAMS STREET
SUITE 2850
CHICAGO IL 60606

EXAMINER

TON, M

ART UNIT

PAPER NUMBER

2871

DATE MAILED:

11/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/198,751

Applicant(s)

HIGUCHI ET AL.

Examiner

Toan Ton

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-31 and 34-80 is/are pending in the application.
- 4a) Of the above claim(s) 6-15, 36 and 37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 16-31, 34-35, 38-80 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2871

Double Patenting

1. See detailed explanations in the previous action mailed 04-05-01.

Claim Rejections - 35 U.S.C. § 112

2. Claims 22, 54, 60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims recite the insulating layer being a light absorbing layer. Materials such as organic resin, as claimed in dependent claims, commonly are not considered as light absorbing material. Thus, dependent claims are inconsistent with independent claims.

3. Claims 30-31 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are : a pigment or carbon-based material to be added to organic resin (since Applicant stated that since a pigment or carbon-based material is required for the organic resin to be considered as light-absorbing).

Claim Rejections - 35 U.S.C. § 102

4. Claims 1, 42-44 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Majima et al (US 5592318)

Art Unit: 2871

See Figures 1-4.

Majima discloses the filler comprising aluminum film coated with polyimide resin (i.e., light absorbing insulating material)

Claim Rejections - 35 U.S.C. § 103

5. Claims 66-71, 6, 8, 45-46, 54-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majima as applied to claims 1, 42-44.

The use of a liquid crystal display in electronic equipments, e.g., portable telephone, video camera, mobile computer, etc., is notoriously known and common in the art for advantages including light weight, low power consumption.

Materials such as organic resin are common and known for an insulating film.

Various switching elements such as TFTs, FETs are known and common in the art.

6. Claims 2-5, 28-31, 34-35, 53, 71-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majima as applied to claims 1, 6, 8, 42-46, 54-59, and further in view of Shimada et al (US 5877832)

Shimada shows in Figure 9A pixels having a first electrode 11a and a second metal electrode 40, wherein this arrangement is known to yield advantages including reduction in disconnection.

Art Unit: 2871

Pertaining to the first electrode being a metal layer, a reflective-type LCD device is known to yield advantages over a transmissive-type device including no back light. The conventional reflective-type LCD commonly employs a reflective (metal such as Al, Cr, Ti, Mo, Ta) electrode.

7. Claims 16-17, 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majima as applied to claims 1, 6, 8, 42-46, 54-59, and further in view of Misawa et al (US 5250931).

A conventional peripheral driving circuit is generally composed of semiconductor chips such as an integrated circuit (IC). Misawa discloses that such conventional peripheral driving circuit suffers several problems such as low reliability for the connections, high manufacturing costs (col. 1, lines 30-68). Misawa solves the problems through the use of TFTs rather than semiconductor chips for the driving circuit (see col. 2, lines 7-12). Therefore, it would have been obvious to one of ordinary skill in the art to employ TFTs for the driving circuit.

8. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majima in view of Misawa as applied to claims 16-17, 22-27, and further in view of Kunii et al (US 5412493).

Kunii discloses an active matrix LCD device having LDD structure thin film transistors connected in series for achieving advantages such as suppressing leakage current. Therefore, it

Art Unit: 2871

would have been obvious to one of ordinary skill in the art to employ an LDD structure thin film transistors connected in series for achieving advantages such as suppressing leakage current.

9. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Majima in view of Misawa as applied to claims 16-17, 22-27, and further in view of Shimada.

See detailed explanations of Shimada above.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2871

Response to Arguments

11. Applicant's arguments filed 08-17-01 have been fully considered but they are not persuasive.

Applicant's only arguments are as follows :

(1) Dependent claims 22, 54, 60 are directed to the interlayer insulating film (which is different from the filler) and not related to the light absorbing layer.

(2) The present invention discloses that the organic resin is not light absorbing by itself, but requires a pigment or carbon-based material to be added to it.

Examiner's responses to Applicant's only arguments are as follows :

(1) As presently claimed, the interlayer insulating film is structurally the same as the insulating film of Majima. See Figures 1-4 of Majima. The rejection under 35 USC 112 is maintained.

(2) It is noted that the features upon which applicant relies (i.e., the organic resin is not light absorbing by itself, but requires a pigment or carbon-based material to be added to it) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

Further, since a pigment or carbon-based material is required for the organic resin to be considered as light-absorbing (as stated by Applicant), a new 35 USC 112 (lacks of essential elements) is applied.

Art Unit: 2871

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. TON whose telephone number is (703) 305-3489. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

November 5, 2001


TOANTON
PRIMARY EXAMINER